

Split 7 08-08-08

Dart Aerospace Ltd.

Date:  
User:

Monday 21/07/2008 10:00:00 AM  
Julie JONES

### Process Sheet

Customer : DU-DAR001 Dart Helicopters Services  
Job Number : 40684-2  
Estimate Number : 13345  
P.O. Number :  
This Issue : 21/07/2008 S.O. No. :  
Print Rev. : NC  
First Issue : 11 Type : LARGE FAB ASSY  
Previous Run : 39485

Drawing Name : END FITTING ASS'Y

Part Number : D3763041  
Drawing Number : D3763 REV B  
Project Number : N/A  
Drawing Revision : B  
Material :  
Due Date : 01/08/2008

Qty: 10 Um: Eac

16

Written By :  
Checked & Approved By : JUD 08.7.21  
Comment : Est Rev:A 08-05-20 new issue DD verified by:ec  
Est Rev:B 08-07-18 revB as per dwg DD verified by:EC

#### Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1  
Pick Packing Kit

2.0	D37631	End Fitting
-----	--------	-------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

End Fitting

batch: 40703 ✓ 40703 Pl 08-08-08 Pl 08-08-07

3.0	D37633	Tube
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Tube

batch: 40704 ✓ 40704 Pl 08-08-08 MF 08-08-06

4.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
-----	-------------	------------------------------



Comment: LARGE FABRICATION RESOURCE 1

1-make a 0.063" chamfer on D3763-1 fitting before ass'y

2-assemble as per dwg D3763 using locating pin DT 9014

3-weld as per dwg D3763 QSI004

Alum. rod Batch: 11/08 436 Pl 08-08-08 Pl 08-08-07

SP 08-08-14 16



## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: END FITTING ASS'Y

Job Number: 40684

Part Number: D3763041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with Dart part # using a fine point permanent marker and Stock

Location: GA

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



mf 08-08-18

6.1

chemical conversion cost as per 051005 4.1 SMD 08/08/11

6.2



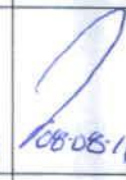
QC 3.

08/08/18  
08/08/11 08-08-18

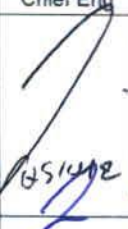

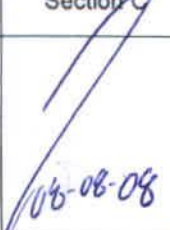
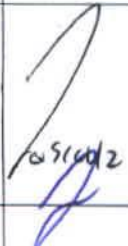
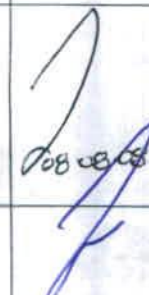




# Dart Aerospace Ltd

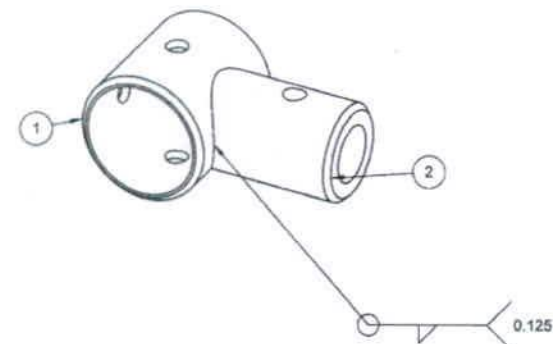
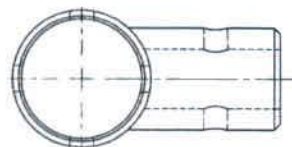
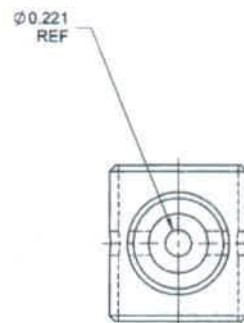
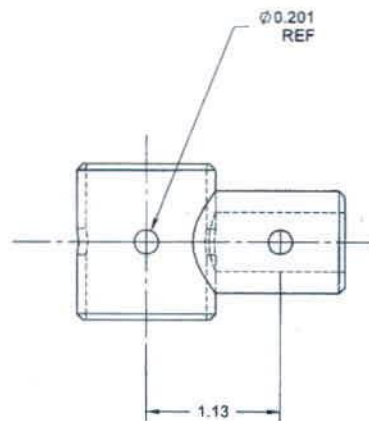
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
08-08-11	6.1 6.2	Add chemical conversion coating: CC3 perm. Change. 	SAD	08/08/11	2	 08-08-11	 08-08-11	

Part No: D3763-041 PAR #: \_\_\_\_\_ Fault Category: hge. FAB NCR: Yes No DQA: NA Date: 08-08-21  
D3784-041/043/044  
CD412-769-043/044 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: <u>40684</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08-08-08	4.0	It was found that 8 parts were welded incorrectly. The D3763-1 was welded over the 0.201. R.C: Employee did not weld as per chug.	 08/08/08	Qty 2 parts good. <del>Replace Qty 8 with</del> <del>2 split was</del> <del>scrap &amp; destroy the</del> incorrect 8 parts. Weld/drg holes & redrill	 08-08-08	 08-08-08	 08/08/08	 08-08-08

NOTE: Date & initial all entries





ITEM NO.	PART NUMBER	DESCRIPTION	QTY. (-041)
1	D3783-3	TUBE	1
2	D3783-1	FITTING	1

**D3763-041 END FITTING ASSY**

RELEASED  
08-07-10

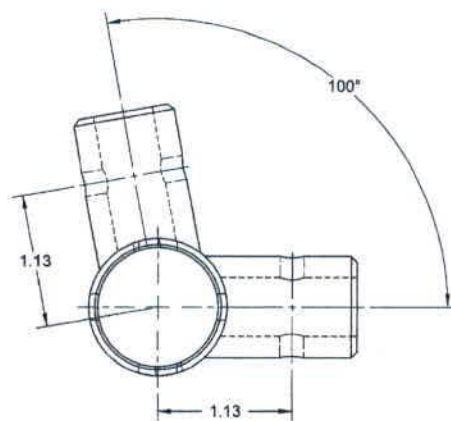
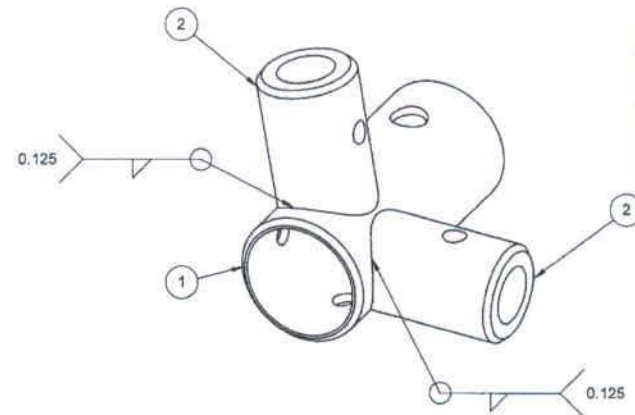
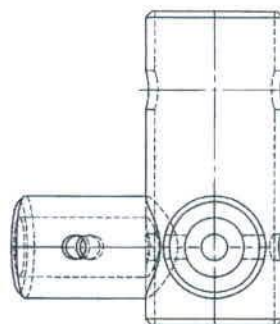
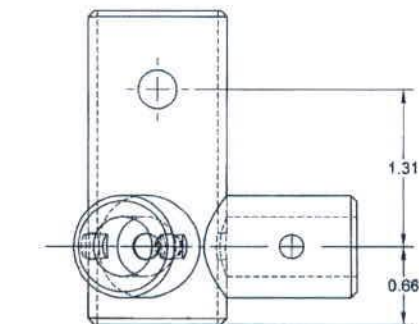
W/D 40684

- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: CHEMICAL CONVERSION COAT ASSEMBLY PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.03 lbs
  - 8) WELD: PER DART QSI 004

B	CHANGE HOLES SIZE, ADD -7 PART AND -045 ASSY	HS	08.06.23
A	NEW ISSUE	HS	08.06.04
REV.	DESCRIPTION	BY	DATE
DESIGN	HS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D3763</b> TITLE <b>END FITTING</b> SCALE <b>NTS</b> COPYRIGHT © 2008 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	
DRAWN	HS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.		REV. B	
DATE	08.06.23	SHEET 1 OF 9	







ITEM NO.	PART NUMBER	DESCRIPTION	QTY. (-043)
1	D3763-5	TUBE	1
2	D3763-1	FITTING	2

Wb 40684

# D3763-043 END FITTING ASSY, LH

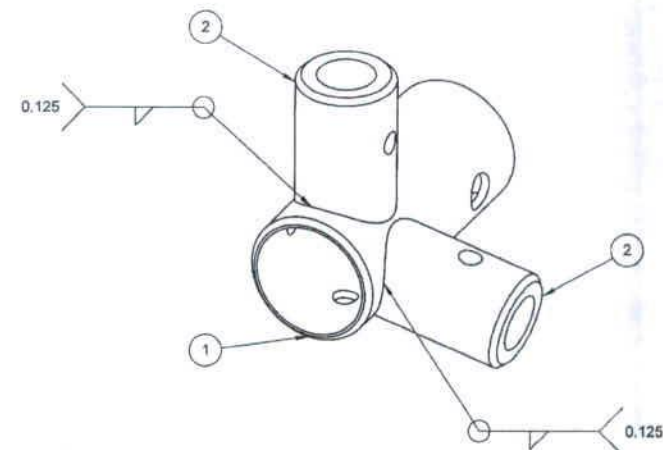
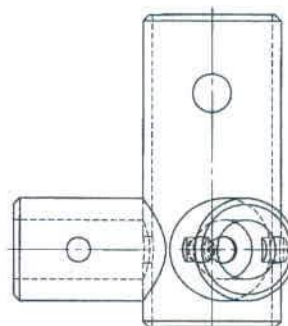
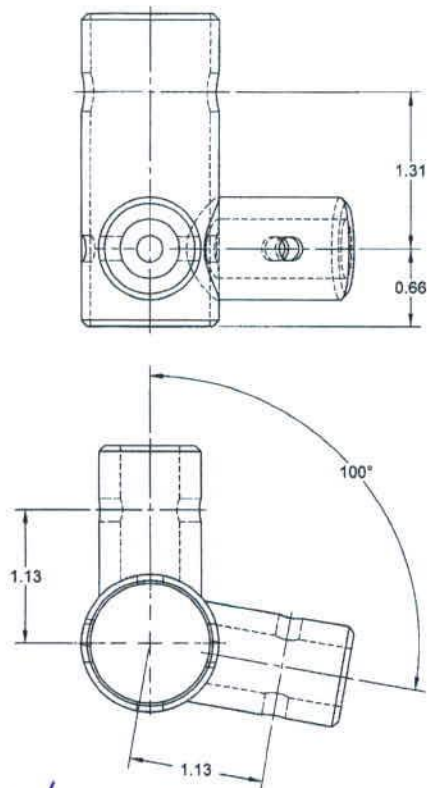
RELEASED  
08-01-10/10P

## NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT ASSEMBLY PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.05 lbs
- 8) WELD: PER DART QSI 004

DESIGN	HS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
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MFG. APPR.			SHEET 2 OF 9
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY. (-044)
1	D3763-6	TUBE	1
2	D3763-1	FITTING	2

# D3763-044 END FITTING ASSY, RH

## NOTES:

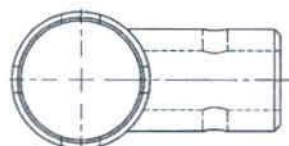
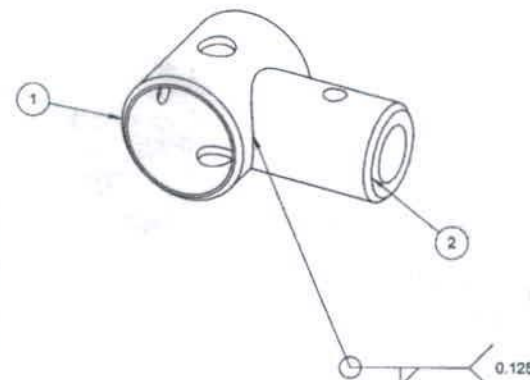
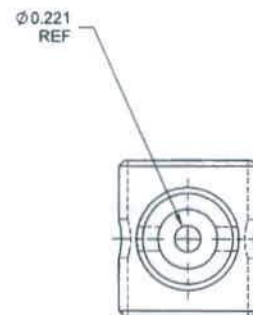
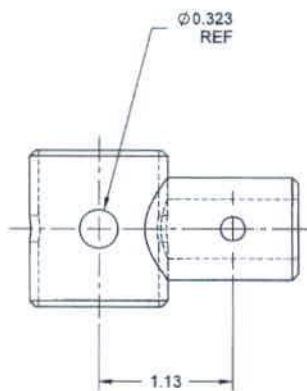
- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT ASSEMBLY PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.05 lbs
- 8) WELD: PER DART QSI 004

RELEASED  
08-07-10

DESIGN	HS	<b>DART AEROSPACE LTD</b>	
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MFG. APPR.		<b>D3763</b>	SHEET 3 OF 9
APPROVED		TITLE	SCALE
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY. (-045)
1	D3763-7	TUBE	1
2	D3763-1	FITTING	1


**D3763-045 END FITTING ASSY**

**RELEASED**  
08-07-10/10/10

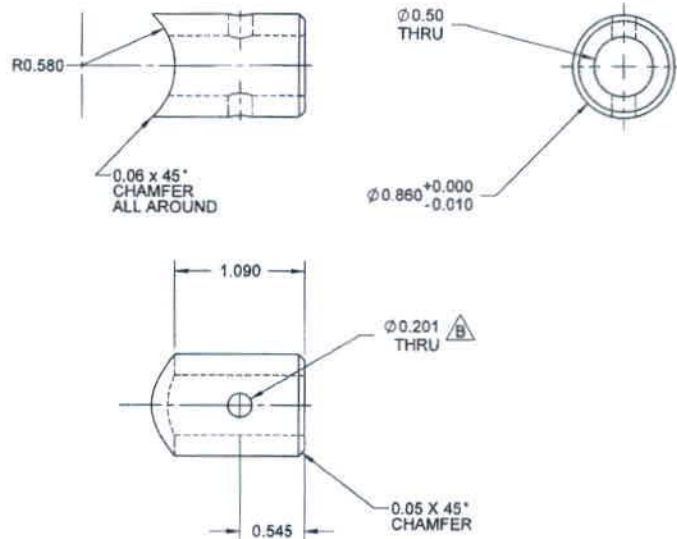
40684

**NOTES:**

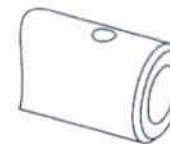
- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT ASSEMBLY PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.03 lbs
- 8) WELD: PER DART QSI 004

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MFG. APPR.		<b>D3763</b>	SHEET 4 OF 9
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**D3763-1 FITTING**



*W040684*

**NOTES:**

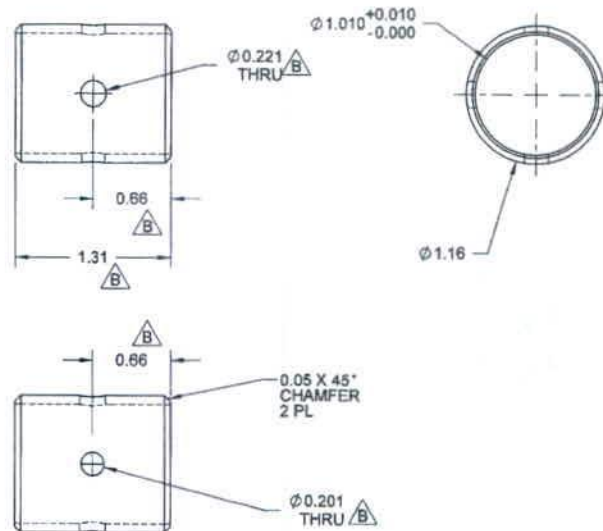
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM ROUND BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC M6061T6R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.02 lbs

**RELEASED**  
108-07-10-THP

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MFG. APPR.		<b>D3763</b>	SHEET 5 OF 9
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**D3763-3 TUBE**

*Wb 40684*

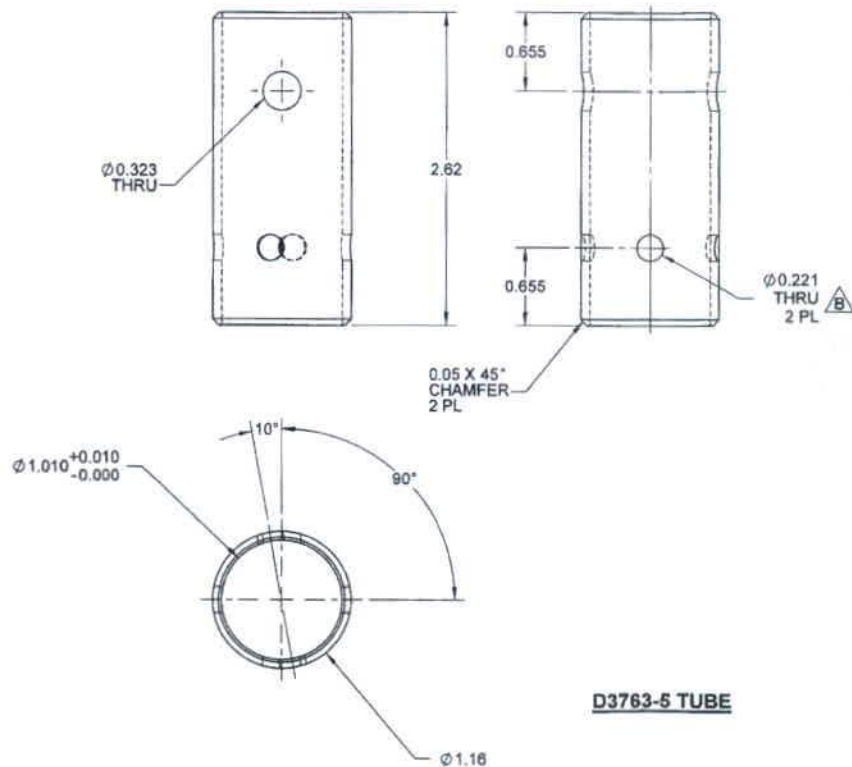
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08 07 10 14 20

**NOTES:**

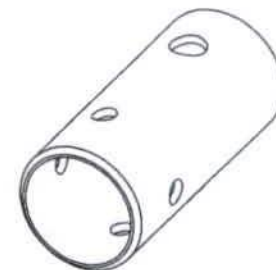
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T652) ALUMINUM ROUND BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC M6061T6R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.01 lbs

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DRAWN	HS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3763	SHEET 6 OF 9
APPROVED		TITLE	SCALE
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**D3763-5 TUBE**



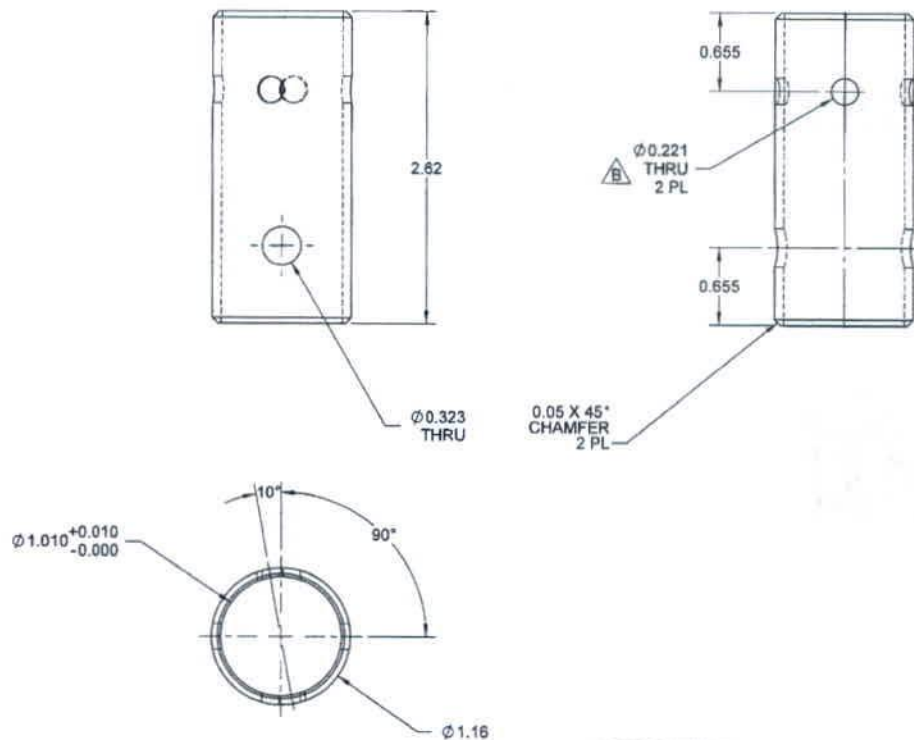
- NOTES:**
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM ROUND BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC M6061T6R)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.02 lbs

DESIGN	HS	<b>DART AEROSPACE LTD</b>	
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CHECKED	HS	DRAWING NO. <b>D3763</b>	REV. B
MFG. APPR.		TITLE	SHEET 7 OF 9
APPROVED		<b>END FITTING</b>	SCALE
DE APPR.			NTS
DATE	08.06.23	COPYRIGHT © 2008 BY DART AEROSPACE LTD	

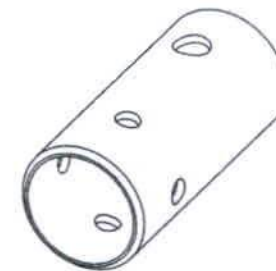
RELEASED  
69-07-1074







**D3763-6 TUBE**

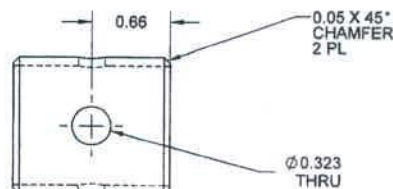
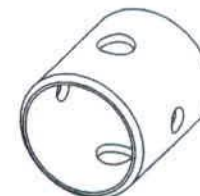
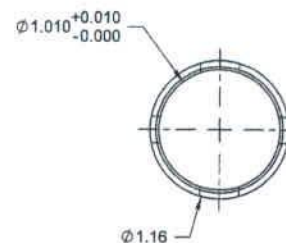
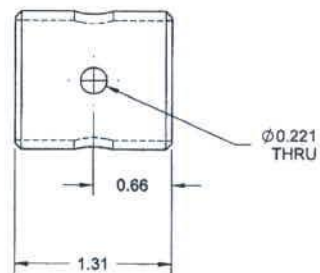


- NOTES:**
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM ROUND BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC M6061T6R)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.02 lbs

DESIGN	HS	<b>DART AEROSPACE LTD</b>	
DRAWN	HS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		<b>D3763</b>	SHEET 8 OF 9
APPROVED		TITLE	SCALE
DE APPR.		<b>END FITTING</b>	NTS
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RELEASED  
08-07-2020





**D3763-7 TUBE**

**RELEASED**  
10-07-10

*W/O 40684*

- NOTES:**
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM ROUND BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC M6061T6R)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.01 lbs

DESIGN	HS	<b>DART AEROSPACE LTD</b>	
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CHECKED		DRAWING NO.	REV. B
MFG. APPR.		<b>D3763</b>	SHEET 9 OF 9
APPROVED		TITLE	SCALE
DE APPR.		<b>END FITTING</b>	NTS
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**L Lacelle**

---

**From:** Harvey Siemens [hsiemens@dartaero.com]  
**Sent:** August 8, 2008 1:04 PM  
**To:** 'L Lacelle'  
**Cc:** mfauteux@dartaero.com; 'David Shepherd'  
**Subject:** RE: aft facing seat

Linda

I guess we should have had you in the discussion regarding the production of those parts. We did notice that those two holes were very similar in dimension but were assured that production would have no problem building it correctly.

The only solution, that I can see, is to weld/plug the .221 holes and re-drill at the .201 dimension – if that's possible. The 0.221 dimension would have too much play to use it in that condition.

Sorry that's all I can suggest.

Regards,

*Harvey Siemens*

Mechanical Designer  
**DART** Aerospace Ltd.

Ph: 403-717-0328  
Fax: 403-717-1288  
Email: [hsiemens@dartaero.com](mailto:hsiemens@dartaero.com)

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**From:** L Lacelle [mailto:llacelle@dartaero.com]  
**Sent:** Friday, August 08, 2008 10:41 AM  
**To:** 'Harvey Siemens'  
**Cc:** mfauteux@dartaero.com  
**Subject:** aft facing seat  
**Importance:** High

Hi Harvey,  
There are 8 x D3763-041's that were welded on the wrong hole, is this a problem? Can they be saved? The fitting was welded on the face of the .201 instead of the .221...  
??????

Thank You,  
Linda Lacelle  
Production Manager  
Dart Aerospace Ltd

08/08/2008



L Lacelle

**From:** Harvey Siemens [hsiemens@dartaero.com]  
**Sent:** August 8, 2008 1:04 PM  
**To:** 'L Lacelle'  
**Cc:** mfauteux@dartaero.com; 'David Shepherd'  
**Subject:** RE: aft facing seat

Linda

I guess we should have had you in the discussion regarding the production of those parts. We did notice that those two holes were very similar in dimension but were assured that production would have no problem building it correctly.

The only solution, that I can see, is to weld/plug the .221 holes and re-drill at the .201 dimension – if that's possible. The 0.221 dimension would have too much play to use it in that condition.

Sorry that's all I can suggest.

Regards,

Harvey Siemens

Mechanical Designer  
**DART** Aerospace Ltd.

Ph: 403-717-0328  
Fax: 403-717-1288  
Email: [hsiemens@dartaero.com](mailto:hsiemens@dartaero.com)

CARL  
COME SEE ME LL  
😊

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